STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number: 10/589,594
Source: IFWP
Date Processed by STIC: 8/28/06

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1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**>, **EFS Submission User Manual** - ePAVE)
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Revised 01/10/06

IFWP

RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: **US/10/589,594** TIME: 10:43:27

Input Set : **A:\082368-008900US.txt**
Output Set: **N:\CRF4\08282006\J589594.raw**

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      4 <110> APPLICANT: Nakamura, Yusuke
      5       Furukawa, Yoichi
      7 <120> TITLE OF INVENTION: METHOD FOR DIAGNOSING COLORECTAL CANCERS
     10 <130> FILE REFERENCE: 082368-008900US
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/589,594
C--> 12 <141> CURRENT FILING DATE: 2006-08-15
     12 <150> PRIOR APPLICATION NUMBER: PCT/JP2004/002145
     13 <151> PRIOR FILING DATE: 2004-02-24
     15 <160> NUMBER OF SEQ ID NOS: 23
     17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     19 <210> SEQ ID NO: 1
     20 <211> LENGTH: 2624
     21 <212> TYPE: DNA
     22 <213> ORGANISM: Homo sapiens
     24 <220> FEATURE:
     25 <221> NAME/KEY: CDS
     26 <222> LOCATION: (294)...(1688)
     28 <400> SEQUENCE: 1
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     30 gcgaccgcgg agggtggcga ggggcggcca ggacccgcag ccccggggcc gggccggtcc 120
     31 ggaccgccag ggagggcagg tcagtgggca gatcgcgtcc gcgggattca atctctgccc 180
     32 gctctgataa cagtcctttt ccctggcgct cacttcgtgc ctggcacccg gctgggcgcc 240
     33 tcaagaccgt tgtctcttcg atcgcttctt tggacttggc gaccatttca gag atg    296
     34                                                          Met
     35                                                           1
     37 tct tcc aga agt acc aaa gat tta att aaa agt aag tgg gga tcg aag   344
     38 Ser Ser Arg Ser Thr Lys Asp Leu Ile Lys Ser Lys Trp Gly Ser Lys
     39              5                  10                  15
     41 cct agt aac tcc aaa tcc gaa act aca tta gaa aaa tta aag gga gaa   392
     42 Pro Ser Asn Ser Lys Ser Glu Thr Thr Leu Glu Lys Leu Lys Gly Glu
     43          20                  25                  30
     45 att gca cac tta aag aca tca gtg gat gaa atc aca agt ggg aaa gga   440
     46 Ile Ala His Leu Lys Thr Ser Val Asp Glu Ile Thr Ser Gly Lys Gly
     47      35                  40                  45
     49 aag ctg act gat aaa gag aga cac aga ctt ttg gag aaa att cga gtc   488
     50 Lys Leu Thr Asp Lys Glu Arg His Arg Leu Leu Glu Lys Ile Arg Val
     51  50                  55                  60                  65
     53 ctt gag gct gag aag gag aag aat gct tat caa ctc aca gag aag gac   536
     54 Leu Glu Ala Glu Lys Glu Lys Asn Ala Tyr Gln Leu Thr Glu Lys Asp
     55                  70                  75                  80
     57 aaa gaa ata cag cga ctg aga gac caa ctg aag gcc aga tat agt act   584
     58 Lys Glu Ile Gln Arg Leu Arg Asp Gln Leu Lys Ala Arg Tyr Ser Thr
     59              85                  90                  95
```

see p. 8

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: US/10/589,594 TIME: 10:43:27

Input Set : A:\082368-008900US.txt
Output Set: N:\CRF4\08282006\J589594.raw

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61 acc gca ttg ctt gaa cag ctg gaa gag aca acg aga gaa gga gaa agg   632
62 Thr Ala Leu Leu Glu Gln Leu Glu Glu Thr Thr Arg Glu Gly Glu Arg
63         100                 105                 110
65 agg gag cag gtg ttg aaa gcc tta tct gaa gag aaa gac gta ttg aaa   680
66 Arg Glu Gln Val Leu Lys Ala Leu Ser Glu Glu Lys Asp Val Leu Lys
67     115                 120                 125
69 caa cag ttg tct gct gca acc tca cga att gct gaa ctt gaa agc aaa   728
70 Gln Gln Leu Ser Ala Ala Thr Ser Arg Ile Ala Glu Leu Glu Ser Lys
71 130                 135                 140                 145
73 acc aat aca ctc cgt tta tca cag act gtg gct cca aac tgc ttc aac   776
74 Thr Asn Thr Leu Arg Leu Ser Gln Thr Val Ala Pro Asn Cys Phe Asn
75                 150                 155                 160
77 tca tca ata aat aat att cat gaa atg gaa ata cag ctg aaa gat gct   824
78 Ser Ser Ile Asn Asn Ile His Glu Met Glu Ile Gln Leu Lys Asp Ala
79             165                 170                 175
81 ctg gag aaa aat cag cag tgg ctc gtg tat gat cag cag cgg gaa gtc   872
82 Leu Glu Lys Asn Gln Gln Trp Leu Val Tyr Asp Gln Gln Arg Glu Val
83         180                 185                 190
85 tat gta aaa gga ctt tta gca aag atc ttt gag ttg gaa aag aaa acg   920
86 Tyr Val Lys Gly Leu Leu Ala Lys Ile Phe Glu Leu Glu Lys Lys Thr
87     195                 200                 205
89 gaa aca gct gct cat tca ctc cca cag cag aca aaa aag cct gaa tca   968
90 Glu Thr Ala Ala His Ser Leu Pro Gln Gln Thr Lys Lys Pro Glu Ser
91 210                 215                 220                 225
93 gaa ggt tat ctt caa gaa gag aag cag aaa tgt tac aac gat ctc ttg   1016
94 Glu Gly Tyr Leu Gln Glu Glu Lys Gln Lys Cys Tyr Asn Asp Leu Leu
95                 230                 235                 240
97 gca agt gca aaa aaa gat ctt gag gtt gaa cga caa acc ata act cag   1064
98 Ala Ser Ala Lys Lys Asp Leu Glu Val Glu Arg Gln Thr Ile Thr Gln
99             245                 250                 255
101 ctg agt ttt gaa ctg agt gaa ttt cga aga aaa tat gaa gaa acc caa   1112
102 Leu Ser Phe Glu Leu Ser Glu Phe Arg Arg Lys Tyr Glu Glu Thr Gln
103         260                 265                 270
105 aaa gaa gtt cac aat tta aat cag ctg ttg tat tca caa aga agg gca   1160
106 Lys Glu Val His Asn Leu Asn Gln Leu Leu Tyr Ser Gln Arg Arg Ala
107     275                 280                 285
109 gat gtg caa cat ctg gaa gat gat agg cat aaa aca gag aag ata caa   1208
110 Asp Val Gln His Leu Glu Asp Asp Arg His Lys Thr Glu Lys Ile Gln
111 290                 295                 300                 305
113 aaa ctc agg gaa gag aat gat att gct agg gga aaa ctt gaa gaa gag   1256
114 Lys Leu Arg Glu Glu Asn Asp Ile Ala Arg Gly Lys Leu Glu Glu Glu
115                 310                 315                 320
117 aag aag aga tcc gaa gag ctc tta tct cag gtc cag ttt ctt tac aca   1304
118 Lys Lys Arg Ser Glu Glu Leu Leu Ser Gln Val Gln Phe Leu Tyr Thr
119             325                 330                 335
121 tct ctg cta aag cag caa gaa gaa caa aca agg gta gct ctg ttg gaa   1352
122 Ser Leu Leu Lys Gln Gln Glu Glu Gln Thr Arg Val Ala Leu Leu Glu
123         340                 345                 350
125 caa cag atg cag gca tgt act tta gac ttt gaa aat gaa aaa ctc gac   1400
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PATENT APPLICATION: US/10/589,594 TIME: 10:43:27

Input Set : A:\082368-008900US.txt
Output Set: N:\CRF4\08282006\J589594.raw

```
126 Gln Gln Met Gln Ala Cys Thr Leu Asp Phe Glu Asn Glu Lys Leu Asp
127     355                 360                 365
129 cgt caa cat gtg cag cat caa ttg cat gta att ctt aag gag ctc cga   1448
130 Arg Gln His Val Gln His Gln Leu His Val Ile Leu Lys Glu Leu Arg
131 370                 375                 380                 385
133 aaa gca aga aat caa ata aca cag ttg gaa tcc ttg aaa cag ctt cat   1496
134 Lys Ala Arg Asn Gln Ile Thr Gln Leu Glu Ser Leu Lys Gln Leu His
135                 390                 395                 400
137 gag ttt gcc atc aca gag cca tta gtc act ttc caa gga gag act gaa   1544
138 Glu Phe Ala Ile Thr Glu Pro Leu Val Thr Phe Gln Gly Glu Thr Glu
139             405                 410                 415
141 aac aga gaa aaa gtt gcc gcc tca cca aaa agt ccc act gct gca ctc   1592
142 Asn Arg Glu Lys Val Ala Ala Ser Pro Lys Ser Pro Thr Ala Ala Leu
143         420                 425                 430
145 aat gaa agc ctg gtg gaa tgt ccc aag tgc aat ata cag tat cca gcc   1640
146 Asn Glu Ser Leu Val Glu Cys Pro Lys Cys Asn Ile Gln Tyr Pro Ala
147     435                 440                 445
149 act gag cat cgc gat ctg ctt gtc cat gtg gaa tac tgt tca aag tag   1688
150 Thr Glu His Arg Asp Leu Leu Val His Val Glu Tyr Cys Ser Lys  *
151 450                 455                 460
153 caaaataagt atttgttttg atattaaaag attcaatact gtattttctg ttagcttgtg 1748
154 ggcattttga attatatatt tcacattttg cataaaactg cctatctacc tttgacactc 1808
155 cagcatgcta gtgaatcatg tatcttttag gctgctgtgc atttctcttg gcagtgatac 1868
156 ctccctgaca tggttcatca tcaggctgca atgacagaat gtggtgagca gcgtctactg 1928
157 agactactaa cattttgcac tgtcaaaata cttggtgagg aaaagatagc tcaggttatt 1988
158 gctaatgggt taatgcacca gcaagcaaaa tattttatgt tttgggggtt tgaaaaatca 2048
159 aagataatta accaaggatc ttaactgtgt tcgcattttt tatccaagca cttagaaaac 2108
160 ctacaatcct aattttgatg tccattgtta agaggtggtg atagatacta ttttttttt 2168
161 catattgtat agcggttatt agaaaagttg gggattttct tgatctttat tgctgcttac 2228
162 cattgaaact taacccagct gtgttcccca actctgttct gcgcacgaaa cagtatctgt 2288
163 ttgaggcata atcttaagtg gccacacaca atgttttctc ttatgttatc tggcagtaac 2348
164 tgtaacttga attacattag cacattctgc ttagctaaaa ttgttaaaat aaactttaat 2408
165 aaacccatgt agccctctca tttgattgac agtattttag ttatttttgg cattcttaaa 2468
166 gctgggcaat gtaatgatca gatctttgtt tgtctgaaca ggtattttta tacatgcttt 2528
167 ttgtaaacca aaaactttta aatttcttca ggttttctaa catgcttacc actgggctac 2588
168 tgtaaatgag aaaagaataa aattatttaa tgtttt                          2624
170 <210> SEQ ID NO: 2
171 <211> LENGTH: 464
172 <212> TYPE: PRT
173 <213> ORGANISM: Homo sapiens
175 <400> SEQUENCE: 2
176 Met Ser Ser Arg Ser Thr Lys Asp Leu Ile Lys Ser Lys Trp Gly Ser
177  1               5                  10                  15
178 Lys Pro Ser Asn Ser Lys Ser Glu Thr Thr Leu Glu Lys Leu Lys Gly
179             20                  25                  30
180 Glu Ile Ala His Leu Lys Thr Ser Val Asp Glu Ile Thr Ser Gly Lys
181         35                  40                  45
182 Gly Lys Leu Thr Asp Lys Glu Arg His Arg Leu Leu Glu Lys Ile Arg
183     50                  55                  60
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RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: US/10/589,594 TIME: 10:43:27

Input Set : A:\082368-008900US.txt
Output Set: N:\CRF4\08282006\J589594.raw

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184 Val Leu Glu Ala Glu Lys Glu Lys Asn Ala Tyr Gln Leu Thr Glu Lys
185 65                  70                  75                  80
186 Asp Lys Glu Ile Gln Arg Leu Arg Asp Gln Leu Lys Ala Arg Tyr Ser
187                 85                  90                  95
188 Thr Thr Ala Leu Leu Glu Gln Leu Glu Glu Thr Thr Arg Glu Gly Glu
189             100                 105                 110
190 Arg Arg Glu Gln Val Leu Lys Ala Leu Ser Glu Glu Lys Asp Val Leu
191         115                 120                 125
192 Lys Gln Gln Leu Ser Ala Ala Thr Ser Arg Ile Ala Glu Leu Glu Ser
193     130                 135                 140
194 Lys Thr Asn Thr Leu Arg Leu Ser Gln Thr Val Ala Pro Asn Cys Phe
195 145                 150                 155                 160
196 Asn Ser Ser Ile Asn Asn Ile His Glu Met Glu Ile Gln Leu Lys Asp
197                 165                 170                 175
198 Ala Leu Glu Lys Asn Gln Gln Trp Leu Val Tyr Asp Gln Gln Arg Glu
199             180                 185                 190
200 Val Tyr Val Lys Gly Leu Leu Ala Lys Ile Phe Glu Leu Glu Lys Lys
201         195                 200                 205
202 Thr Glu Thr Ala Ala His Ser Leu Pro Gln Gln Thr Lys Lys Pro Glu
203     210                 215                 220
204 Ser Glu Gly Tyr Leu Gln Glu Glu Lys Gln Lys Cys Tyr Asn Asp Leu
205 225                 230                 235                 240
206 Leu Ala Ser Ala Lys Lys Asp Leu Glu Val Glu Arg Gln Thr Ile Thr
207                 245                 250                 255
208 Gln Leu Ser Phe Glu Leu Ser Glu Phe Arg Arg Lys Tyr Glu Glu Thr
209             260                 265                 270
210 Gln Lys Glu Val His Asn Leu Asn Gln Leu Leu Tyr Ser Gln Arg Arg
211         275                 280                 285
212 Ala Asp Val Gln His Leu Glu Asp Asp Arg His Lys Thr Glu Lys Ile
213     290                 295                 300
214 Gln Lys Leu Arg Glu Glu Asn Asp Ile Ala Arg Gly Lys Leu Glu Glu
215 305                 310                 315                 320
216 Glu Lys Lys Arg Ser Glu Glu Leu Leu Ser Gln Val Gln Phe Leu Tyr
217                 325                 330                 335
218 Thr Ser Leu Leu Lys Gln Gln Glu Glu Gln Thr Arg Val Ala Leu Leu
219             340                 345                 350
220 Glu Gln Gln Met Gln Ala Cys Thr Leu Asp Phe Glu Asn Glu Lys Leu
221         355                 360                 365
222 Asp Arg Gln His Val Gln His Gln Leu His Val Ile Leu Lys Glu Leu
223     370                 375                 380
224 Arg Lys Ala Arg Asn Gln Ile Thr Gln Leu Glu Ser Leu Lys Gln Leu
225 385                 390                 395                 400
226 His Glu Phe Ala Ile Thr Glu Pro Leu Val Thr Phe Gln Gly Glu Thr
227                 405                 410                 415
228 Glu Asn Arg Glu Lys Val Ala Ala Ser Pro Lys Ser Pro Thr Ala Ala
229             420                 425                 430
230 Leu Asn Glu Ser Leu Val Glu Cys Pro Lys Cys Asn Ile Gln Tyr Pro
231         435                 440                 445
232 Ala Thr Glu His Arg Asp Leu Leu Val His Val Glu Tyr Cys Ser Lys
```

RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: US/10/589,594 TIME: 10:43:27

Input Set : A:\082368-008900US.txt
Output Set: N:\CRF4\08282006\J589594.raw

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233    450                 455                 460
236 <210> SEQ ID NO: 3
237 <211> LENGTH: 22
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
243       RT-PCR
245 <400> SEQUENCE: 3
246 acaacagcct caagatcatc ag                                          22
248 <210> SEQ ID NO: 4
249 <211> LENGTH: 20
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
255       RT-PCR
257 <400> SEQUENCE: 4
258 ggtccaccac tgacacgttg                                             20
260 <210> SEQ ID NO: 5
261 <211> LENGTH: 23
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
267       RT-PCR
269 <400> SEQUENCE: 5
270 agagatccga agagctctta tct                                         23
272 <210> SEQ ID NO: 6
273 <211> LENGTH: 21
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
279       RT-PCR
281 <400> SEQUENCE: 6
282 gatgctcagt ggctggatac t                                           21
284 <210> SEQ ID NO: 7
285 <211> LENGTH: 24
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
291       RT-PCR
293 <400> SEQUENCE: 7
294 cgaaagcttc agagatgtct tcca                                        24
296 <210> SEQ ID NO: 8
297 <211> LENGTH: 27
298 <212> TYPE: DNA
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/28/2006
PATENT APPLICATION: **US/10/589,594** TIME: 10:43:28

Input Set : **A:\082368-008900US.txt**
Output Set: **N:\CRF4\08282006\J589594.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:23; N Pos. 489,490,491,492

VERIFICATION SUMMARY DATE: 08/28/2006
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Input Set : **A:\082368-008900US.txt**
Output Set: **N:\CRF4\08282006\J589594.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:485 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:489 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23
L:498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:480

<210> 23
<211> 5089
<212> DNA
<213> Artificial Sequence

<220>
<223> An artificially synthesized vector sequence

<221> misc_feature
<222> (489)...(492)
<223> n = GAP "n" can only represent a single nucleotide, nothing else

<400> 23